

Title (en)
METHOD OF MAKING A HOLLOW COMPOSITE STRUCTURE

Title (de)
HERSTELLUNGSVERFAHREN EINER HOHLEN VERBUNDSTRUKTUR

Title (fr)
PROCÉDÉ DE FABRICATION D'UNE STRUCTURE COMPOSITE CREUSE

Publication
EP 2190650 B1 20170118 (EN)

Application
EP 07871181 A 20071018

Priority

- US 2007081748 W 20071018
- US 83526107 A 20070807

Abstract (en)
[origin: WO2009020466A1] A complex- shaped, three-dimensional fiber reinforced composite structure may be formed by using counteracting pressures applied to a structural lay-up of fiber plies. The fiber plies (104) are arranged on a pressurizable member (106) that may become an integral part of the final product, or may be removed before the product is finalized. The pressurizable member may take the form of a hollow blow molded or rotomolded thermoplastic component or a superplastic formed metallic component having an opening such that the pressurizable member may be vented or pressurized and thus expanded against the fiber plies. In addition, a number of the pressurizable members may be joined in fluid communication, where they may each have different configurations, yet be arranged to form a large, complex- shaped lay-up surface for the fiber plies. The arrangement of the fiber plies onto the pressurizable members may produce integral I-Beam stiffeners, ribs, flanges, and other complex shaped structural components.

IPC 8 full level
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